

AMENDMENTS TO THE CLAIMS

Please amend claims 2 and 4-9 as set forth below.

1. (CANCELED).
2. (CURRENTLY AMENDED) A portable terminal apparatus comprising:
a first receiving system for receiving a quadrature modulated signal and
converting the quadrature modulated signal into an intermediate-frequency signal for output;
a second receiving system comprising at least one system for receiving a BPSK
binary phase shift keying modulated signal and converting the BPSKbinary phase shift keying
modulated signal into an intermediate-frequency signal for output;
an IFintermediate frequency stage for processing both the intermediate-frequency
signal of said first receiving system and the intermediate-frequency signal of said second
receiving system; and
a signal processing system for processing the signal of said first receiving system
that has been passed through said IFintermediate frequency stage and the signal of said second
receiving system that has been passed through said IFintermediate frequency stage,
wherein said IFintermediate frequency stage has at least one ofincludes a
variable gain amplifier for amplifying the intermediate-frequency signal of said first receiving
system and the intermediate-frequency signal of said second receiving system and a quadrature
demodulator for subjecting the intermediate-frequency signals that have been passed through the
variable gain amplifier to quadrature demodulation for outputoutput,
wherein said signal processing system includes a phase shifter that generates an I
signal and a Q signal by demodulating the intermediate-frequency signal output from said
second receiving system so that said I signal and said Q signal coincide with each other in phase.
3. (CANCELED).
4. (CURRENTLY AMENDED) A The portable apparatus as claimed in
claim 2, wherein when said IF stage has said quadrature demodulator, said signal processing
system further includes a phase shifter that generates an I signal and a Q signal that coincide
with each other in phase by demodulating the intermediate-frequency signal output from said
second receiving system through said quadrature demodulator, an adder that adds the I signal

and the Q signal that have passed through said phase shifter, and a correlator that demodulates said BPSK modulated signal based on sum of said adder.

5. (CURRENTLY AMENDED) A-The portable terminal apparatus as claimed in claim 2, wherein when said IF stage has said quadrature demodulator, said signal processing system includes a correlator for demodulating said BPSK-binary phase shift keying modulated signal on the basis of an I signal or a Q signal of said second receiving system obtained by demodulating the intermediate-frequency signal by said quadrature demodulator.

6. (CURRENTLY AMENDED) A-The portable terminal apparatus as claimed in claim 2, wherein when said IF-intermediate frequency stage has said variable gain amplifier and said quadrature demodulator, said portable terminal apparatus includes a control means for fixing gain of said variable gain amplifier at about a maximum gain in demodulating said BPSK-binary phase shift keying modulated signal.

7. (CURRENTLY AMENDED) A-The portable terminal apparatus as claimed in claim 2, wherein when said IF-intermediate frequency stage has said variable gain amplifier and said quadrature demodulator, said portable terminal apparatus includes a control means for controlling gain of said variable gain amplifier to a maximum gain while maintaining linearity on the basis of a demodulated signal obtained by demodulating said BPSK-binary phase shift keying modulated signal.

8. (CURRENTLY AMENDED) A-The portable terminal apparatus as claimed in claim 2, wherein when said IF stage has said variable gain amplifier and said quadrature demodulator, said portable terminal apparatus includes a control means for controlling gain of said variable gain amplifier to about a maximum gain even with nonlinearity on the basis of a demodulated signal obtained by demodulating said BPSK-binary phase shift keying modulated signal.

9. (CURRENTLY AMENDED) A portable terminal apparatus comprising: a first receiving system for receiving a quadrature modulated signal and converting the quadrature modulated signal into an intermediate-frequency signal for output;

a second receiving system comprising at least one system for receiving a BPSK binary phase shift keying modulated signal and converting the BPSK binary phase shift keying modulated signal into an intermediate-frequency signal for output;

an IF-intermediate frequency stage for processing both the intermediate-frequency signal of said first receiving system and the intermediate-frequency signal of said second receiving system; and

a signal processing system for processing the signal of said first receiving system that has been passed through said IF-intermediate frequency stage and the signal of said second receiving system that has been passed through said IF stageintermediate stage,

wherein when said IF stage includes a quadrature demodulator, said signal processing system includes a phase shifter that generates an I signal and a Q signal that coincide with each other in phase.